NBSIR 75-714

Report on Test on a Sample of Non-Standard Size Baby Cribs

Ryan Pierson, Jr.
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Product Systems Section
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Prepared for
Consumer Product Safety Commission
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U.S. DEPARTMENT OF COMMERCE, Rogers C.B. Morton, Secretary
NATIONAL BUREAU OF STANDARDS, Richard W. Roberts, Director

Purpose

A sample of non-standard size baby cribs was tested for compliance with the Proposed Regulation for Non-Standard Size Baby Cribs in order to evaluate the Proposed Regulation, especially the tests and test procedures. A copy of the Proposed Regulation is included as an appendix to this report. The test procedures were found to be easy to interpret and to carry out, and an evaluation of the Proposed Regulation was transmitted to the CPSC during February. This report presents the results obtained from testing the cribs for compliance with the Proposed Regulation, a detailed description of some of the hazards, and some evaluative comments on the Proposed Regulation.

Test Sample

Non-standard size baby cribs are defined by §1509.2(b) and (c) of the Proposed Regulation. A sample of eight such cribs was purchased from local retail stores during December 1974 and January 1975. One of the cribs had been preassembled and folded to fit into a retail carton. Another was bought as a set of preassembled and folded components and a separate canopy packed in a carton. These cribs could be erected and made ready for use without using tools. Six of the cribs were bought as unassembled components packed in cartons. The components were unpacked and assembled or erected according to the manufacturer's instructions. Not all cribs included instructions. Crib mattresses were included in the retail cartons of five of the cribs. One crib could be used without a mattress, and mattresses were purchased separately for the two remaining cribs.

The cribs tested are shown in figures 1 through 5; identifying numbers were assigned to the cribs for convenience in evaluation and tabulation of results.

The cribs and mattresses were evaluated for compliance with the Proposed Regulation for Non-Standard Size Baby Cribs.

The assembly instructions and the retail cartons were also evaluated for compliance.

Test Results

The results are presented and discussed with the assumption that the reader is familiar with the requirements of the Proposed Regulation (see Appendix).

The results of evaluation for compliance with proposed requirements of §1509.3 through §1509.9 are given in Table 1. Those for evaluation of the assembly instructions for compliance with §1509.10 are in Table 2. Table 3 presents results obtained from evaluating the retail cartons and cribs for compliance with §1509.11. No attempt was made to determine whether the record keeping of the manufacturers or importers complies with the requirements of §1509.12.

Crib Side Height (§1509.3 and §1509.9)

Except for crib No. 2, none of the cribs had adjustable crib side heights. Crib No. 2 had a horizontally-hinged crib side that could be either raised or lowered to give two different crib side heights. All of the cribs met the 12.7 cm* minimum crib side height requirement of §1509.3 (a). Cribs No. 1, 7, and 8, supplied without crib mattresses, failed to meet the minimum crib side height requirement of §1509.3 (b) and would not have met the requirement of §1509.9 (a) if they had been supplied with crib mattresses. Cribs No. 4, 5, and 6, supplied with crib mattresses, failed to meet the minimum crib side height requirement of §1509.9 (a) and would not have met the requirement of §1509.3 (b) if they had been supplied without crib mattresses. Cribs No. 2 and 3, supplied with crib mattresses, met the minimum crib side height requirement of §1509 (a) and would have met the requirement of §1509.3 (b) if they had been supplied without crib mattresses.

Spacing of Unit Components (§1509.4)

Some of the adjacent components of cribs No. 1 and 3 were farther apart than 6.3 cm. "Block A" and "Block B" could both be passed freely between them without using the loading wedge. Some components of crib No. 2 were farther apart than 6.0 cm. "Block A" could be passed freely between them. However, "Block B" could not be passed between any of the adjacent components even when they were stressed with the loading wedge. All of the adjacent components of crib No. 7 were spaced farther apart than 6.3 cm. "Block A" and "Block B" could both be passed freely between them without using the loading wedge. Cribs No. 4, 5, and 6 met the requirements of §1509.4.

There were no openings in the sides or ends of crib No. 8. The sides and ends are composed of an outer layer of tightly woven folded-paper strips and string and an inner layer of cardboard.

Drawing a distinction between uniformly spaced and non-uniformly spaced components does not appear to be useful. It is recommended that all components should meet the requirements of §1509.4 (b).

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*Recommended SI Units are not used in the Proposed Regulation.

Hardware (§1509.7)

The latches of cribs No. 1, 2, 3, and 7 could pinch or crush a child's fingers when the latches were operated. Crib No. 2 had a horizontally hinged side. A child's hand or finger could be crushed if it were caught in the decreasing clearance along the hinge line as the crib side is raised. See figure 6. Cribs No. 4, 5, and 6 are swinging cribs that have rigid sides and end panels. These cribs have no latching devices accessible to a child in the crib. However, while cribs No. 5 and 6 are swinging, the clearance between moving and stationary parts presents a crushing hazard. See figure 7.

A child holding on to the ends of cribs No. 1 and 2 or the sides of cribs No. 3 and 7 near the latches or hinges and rocking to and fro would be exposed to a pinching hazard brought about by the small variations in clearance between the adjacent crib components joined by the latches or hinges. The metal mattress support rail of crib No. 3 had burrs that presented a laceration hazard when the crib was used as a youth bed or when the side gate was open.

Cribs No. 4 and 8 had no hardware accessible to a child in the crib, and appeared to offer no pinching, bruising, lacerating, crushing, or amputating hazard.

The legs of crib No. 2 were adjustable in length. The four bolts used to secure the adjustable legs at a selected length could be easily unscrewed by hand. Plastic safety caps were supplied for placement over the bolt heads that made unscrewing the bolts more difficult. With a safety cap in place, simultaneous push and twist forces were required in order to unscrew the bolt. All of the plastic safety caps fractured and three fell off during the first attempt to use them. See figure 8.

One of the latches of crib No. 1 could be released with one distinct action and a force of less than 44.5 N (10 lb). Although the latches of crib No. 3 were designed to be released by two distinct actions, one of the latches could be released by only one distinct action and a force of less than 44.5 N (10 lb), when pulled in a certain direction. The latching devices on crib No. 7 required only one distinct motion and a force of less than 44.5 N (10 lb) to release.

The sides and ends of crib No. 8 do not require latching devices.

Cribs No. 4, 5, and 6 are swinging cribs with rigid sides and end panels. These cribs have no latching devices for the sides or ends. However, these cribs were designed with a locking device at each end which could be secured in order to prevent the crib from swinging. The locking devices, while inaccessible to a child in the crib, required a force of less than 9 N (2 lb) and only one distinct motion to release. Although crib No. 4 was designed to have two locking devices, components for only one device were found in the retail carton.

None of the cribs had woodscrews that would have to be removed during the normal disassembly of the crib. However, crib No. 3 had woodscrews with "one way" heads. This made it difficult to back out the screws that started improperly. Screws forced forward after starting in a wrong direction can result in components that are insecurely fastened or cracked.

Construction and Finishing (§1509.8)

Wooden splinters were found on the upper surface of crib No. 7. The exposed ends of the strips used in the sides and ends of crib No. 8 made the upper surface of the crib sides and ends rough and jagged. The wooden surfaces of the other cribs appeared to be smooth and free of splinters.

Insertion of a woodscrew during the assembly of crib No. 1 caused a side rail to crack. See figure 9.

A wooden slat in the crib side of crib No. 6 was found to be cracked when the crib was unpacked. See figure 10.

The bolt holes in the corner posts of crib No. 3 were too small for the bolts provided. Assembly was accomplished by driving the bolts into the holes with a hammer. This procedure seemed to have worked in this case; however, forcing a bolt through an undersized hole in a component can create a hazard by cracking or splitting the component. Also, the bolt holes were not positioned in the corner posts to give the maximum load bearing strength. See figure 11. After assembly, the lower edges of the crib sides could not be fastened to the corner post at one end of the crib. Consequently, each lower edge of the crib sides could be pushed several inches away from the mattress support by a small horizontal force. See figure 12.

Crib No. 5 could not be completely assembled because only one, instead of the required two, threaded bushings designed to engage machine screws had been embedded in one end of the "stretcher rail" and therefore only one of the machine screws could be engaged to secure the upright post to the "stretcher rail." See figure 13. The assembly drawing for crib No. 5 indicates that several 2" (51 mm) machine screws are to be used in assembling the crib, however, the longest screws included in the retail carton were only 1 1/2" (38 mm) long. Crib No. 6, which is similar to crib No. 5, could not be completely assembled because one pair of machine screw holes, one in the crib end and one in the mattress support rail, were too far out of alignment for the machine screw to enter both of them. In the partially assembled state, a potentially hazardous gap could be produced between the mattress support and crib side by a small horizontal force. See figure 14.

Frequently, if machine screw holes in two different components are not too far out of alignment, assembly of the components can be accomplished by placing or forcing the machine screw through the misaligned holes and

then tightening the screw until the components are forced together. This procedure seems to work in many cases, however, in some cases joining components in this manner causes cracking or splitting of the components.

Cribs No. 4, 5, 6, 7, and 8 had maximum crib side heights, measured from the upper surface of the mattress support to the upper surface of the crib side, less than 40.6 cm. Therefore, these cribs did not meet the requirement of § 1509.8 (c). Cribs No. 1, 2, and 3 met the requirement of § 1509.8 (c).

Mattresses (§ 1509.9)

Cribs No. 1, 4, 5, 6, 7, and 8 had maximum crib side heights, measured from the upper surface of the mattress support to the upper surface of the crib side, less than 50.8 cm. Therefore, the requirement of § 1509.9 (a) could not have been met by any mattress no matter how thin it was. None of the mattresses were greater than two inches (5.1 cm) thick, so it appears that failure to meet the requirement of §1509.9 (a) should be attributed to insufficient crib side height and not to an unreasonably thick mattress.

The mattresses for cribs No. 2 and 3 met the requirement of §1509.9(a).

The possibility that a crib mattress might be thick enough to reduce the vertical distance from the upper surface of the mattress to the upper surface of the crib side or end panel to less than 12.7 cm with the mattress support in its highest adjustable position and the crib side in its lowest adjustable position should be covered by the requirements.

All of the crib mattresses met the dimension requirement of §1509.9(b) except the mattresses for crib No. 8. The mattress had rounded corners that left a gap greater than 1.3 cm at each corner of the crib.

The Proposed Regulation has no requirements on the compressibility or minimum thickness of a mattress. Consideration should be given to the inclusion of such requirements.

Assembly Instructions (§1509.10)

Cribs No. 1, 7, and 8 had no assembly instructions or diagrams. Only cribs No. 2, 3, 4, 5, and 6 had an assembly drawing. Only crib No. 3 had a list and description of all parts and tools required for assembly. Only crib No. 3 had a full size diagram of the required bolts and other fasteners. Only cribs No. 3, 5, and 6 had a cautionary statement concerning the secure tightening and maintaining of bolts and other fasteners. Only crib No. 3 had a cautionary statement that when a child's height reached 0.89 m (35 in), the child should be placed in a youth bed. Cribs No. 2, 5, and 6 had cautionary statements concerning when a child should be removed from the crib, but the 0.89 m (35 in) criterion was not mentioned. Crib No. 3 had a warning that specified the length, width, and

maximum thickness of a mattress to be used that would meet the requirements of §1509.9(b). However, there was no explanation of the substance and intent of §1509.9. None of the other cribs had a warning relative to mattress size.

Identifying Marks, Warning Statement, and Compliance Declaration (§1509.11)

Crib No. 2 had the name of the seller and a number on the underside of the mattress support. The place of business of the seller was not given. Crib No. 3 had the name and place of business of the manufacturer as well as a model number and a lot number on the inside surface of an end panel. None of the other cribs complied with any of the requirements of §1509.11(a)(1) or §1509.11(a)(2). Crib No. 3 had a warning relative to mattress size on an inside surface of an end panel of the crib. None of the other cribs had a warning statement.

The Proposed Requirements contain no test procedure for determining whether markings meet requirement §1509.11(c). However, the markings on cribs No. 2 and 3 appeared to be of a permanent nature and not readily removable or subject to obliteration.

The retail cartons of cribs No. 1, 2, 3, 5, 6, and 7 were marked with the name and address of the manufacturer and seller. ZIP codes were not included in the manufacturer's address on cartons No. 2 and 3 or the seller's address on cartons for cribs No. 5 and 6. The cartons for cribs No. 4 and 8 were marked with the name and address of the seller but not with the manufacturer's name and address. The carton of each crib was marked with a string of numeric or alphanumeric characters that appeared to be either a model number, stock number, catalog number, item number, or article number. No attempt was made to determine whether the number fulfilled the requirement of §1509.11(a)(2). Crib No. 3 bore a label stating: "This crib conforms to Consumer Product Safety Commission Regulations--Part §1508." However, crib No. 3 did not meet all of the requirements. None of the other seven cribs and none of the eight cartons bore a label stating that the crib conforms to applicable regulations promulgated by the CPSC.

Table 1. Evaluation of Cribs and Mattresses for Compliance with the Requirements Through §1509.9 of the Proposed Regulation for Non-Standard Size Baby Cribs

Crib Identification	Crib Side Height (§1509.3)		Spacing of Unit Components (§1509.4)	Hardware (§1509.7)	Construction and Finishing (§1509.8)	Mattresses (§1509.9)
	Least	Greatest				
1	M	F	F	F	F	F
2	M	M	F	F	M	M
3	M	M	F	F	F	M
4	M	F	M	M	F	F
5	M	F	M	F	F	F
6	M	F	M	F	F	F
7	M	F	F	F	F	**
8*	M	F	M	M	F	F

M = Meets requirement
F = Fails to meet requirement

*This item is a bassinet, included for comparison only.
**Crib No. 7 was designed for use without a crib mattress.

Table 2. Evaluation of Crib Assembly Instructions 1/

Crib Identification	Points of Evaluation as Listed in § 1509.10						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	2/	2/	2/	2/	2/	2/	2/
2	M	F	F	3/	F	4/	F
3	M	M	M	3/	M	M	F
4	M	F	F	3/	F	F	F
5	M	F	F	3/	M	5/	F
6	M	F	F	3/	M	5/	F
7	2/	2/	2/	2/	2/	2/	2/
8*	2/	2/	2/	2/	2/	2/	2/

M = Meets requirement.
F = Fails to meet requirement.

*This item is a bassinet, included for comparison only.

1/ Although it is not a requirement, some instructions contained warnings against refinishing the crib with toxic materials, using furniture wax and polish, and using strong detergents to clean surfaces accessible to a baby in the crib.

2/ No assembly instructions were provided.

3/ It is difficult to determine if the requirement is met because some instructions or diagrams were difficult to understand.

4/ The cautionary statement does not refer to a child height of 0.89 m (35 in), but the assembly instructions state: "Manufacturer recommends that child be put in youth bed or a twin bed when the child is able to climb out of the crib."

5/ The cautionary statements do not refer to a child height of 0.89 m (35 in) but in general recommends that a child not be kept in the cradle after he or she has outgrown it (started to crawl), and that parental judgement be used in determining when a child has outgrown a given size baby bed.

Table 3. Evaluation of Identifying Marks, Warning Statement, and Compliance Declaration Required by §1509.11

Crib Identification	Identifying Marks (a)(1)	Identifying Marks (a)(2)	Warning Statement (b)	Method of Marking (c)	Carton Marking (d)(1)	Compliance Statement (e)
1	F	F	F	F	1/	F
2	F	M	F	M	1/	F
3	M	M	M	M	1/	M
4	F	F	F	F	1/	F
5	F	F	F	F	1/	F
6	F	F	F	F	1/	F
7	F	F	F	F	1/	F
8*	F	F	F	F	1/	F

M = Meets requirement.
F = Fails to meet requirement.

*This item is a bassinet, included for comparison only.

1/ A company's name, a mailing address, and a number were on the retail carton. However, no attempt was made to determine whether the number fulfilled the requirement of §1509.11(a)(2).

APPENDIX

Proposed Regulation for Non-Standard Size Baby Cribs.

§ 1509.1 Scope of Part

This part sets forth the requirements whereby non-standard size baby cribs as defined in § 1509.2, are not banned articles under 1500.18(a)(14) of this chapter.

§ 1509.2 Definitions

For the purposes of this part:

(a) A crib is defined as a bed designed to provide sleeping accomodations for an infant.

(b) A standard size baby crib is defined as a crib (1) that is intended for use in or around the home, for travel and other recreational purposes, and (2) is within a range of ± 5.1 centimeters (± 2 inches) of interior length and width dimensions specified for standard (full size) baby cribs in 16 CFR 1508.1(a) and 1508.3.

(c) A non-standard size baby crib is defined as a crib (1) that is intended for use in the home, and (2) exceeds the tolerances for a standard (full size) crib as defined in §1508.1(a) and 1508.3. Mesh/net or non-rigidly constructed baby cribs, cradles, car beds, baby baskets and bassinets are not subject to the provisions in §1509. The following classes of baby cribs are included in the definition of a non-standard size baby crib:

(1) Portable Cribs - a non-standard size baby crib designed so that it may be folded or collapsed without disassembly to occupy a volume substantially less than the volume it occupies when it is used.

(2) Crib-Pen - a non-standard size baby crib, the legs of which may be removed or adjusted to provide a play pen or play yard for a child.

Draft 11/11/74

(3) Specialty Crib - a non-conventionally shaped (circular, hexagonal, etc.) non-standard size baby crib ~~incorporating~~ which requires a special mattress or other non-conventional components.

§ 1509.3 Crib-side height.

Non-standard size baby cribs; shall meet the following requirements if not supplied with a mattress. See § 1509.7 for requirements for cribs supplied with mattress.

(a) With the mattress support in its highest adjustable position and the crib-side in its lowest adjustable position, the vertical distance from the upper surface of the mattress support to the upper surface of the crib-side and/or end panel shall not be less than 12.7 centimeters (5 inches).

(b) With the mattress support in its lowest adjustable position and crib-side in its highest adjustable position, the vertical distance from the upper surface of the mattress support to the upper surface of the crib side and/or end panel shall not be less than 55.9 centimeters (22 inches).

§ 1509.4 Spacing of unit components

(a) Uniformly-spaced components. The distance between adjacent, uniformly-spaced components (such as slats, spindles, and/or corner posts) shall not be greater than 6 centimeters (2-3/8 inches). The distance between any such adjacent components shall not exceed 6.3 centimeters (2-1/2 inches) at any point when subjected to the test procedure specified in § 1509.6(c).

(b) (1) Non-uniformly-spaced components. The distance between adjacent non-uniformly-spaced components (such as slats, spindles, and/or corner posts) shall preclude passage of "block A," specified in § 1509.5(b), when inserted in any orientation.

(2) The spacing between any such adjacent components shall preclude passage of "block B," specified in §1509.5(c), when inserted in any orientation immediately above and below the loading wedge, specified in 1509.5(a), while the components are being subjected to the test procedure specified in §1509.6(a).

§ 1509.5 Component spacing test apparatus.

(a) Loading wedge. The loading wedge shall be a right triangular prism constructed of a smooth rigid material conforming to measurements shown in figure 1.

(b) "Block A": "Block A" shall be a rectangular block constructed of a smooth rigid material, measuring 6 centimeters wide by 10 centimeters high by 10 centimeters long (2-3/8 inches wide by 4 inches high by 4 inches long).

(c) "Block B": "Block B" shall be a rectangular block constructed of a smooth rigid material, measuring 6.3 centimeters wide by 8.2 centimeters high by 8.2 centimeters long (2-1/2 inches wide by 3-1/4 inches high by 3-1/4 inches long).

§1509.6 Component spacing test method.

(a) The apex of the wedge (see §1509.5(a)) shall be placed midway between two vertical components and midway between the upper and lowermost horizontal surfaces of the side. A 9 kilogram (20 pounds) tensile force shall be applied to the wedge perpendicular to the plane of the crib-side.

§ 1509.7 Hardware.

(a) The hardware in a non-standard baby crib shall be designed and constructed to ~~eliminate~~ avoid pinching, bruising, lacerating, crushing, amputating and/or other potentials for injury.

(b) Non-standard size baby cribs shall incorporate locking or latching devices for folding sides or end panels. These devices shall require either a minimum force of 4.5 kilograms (10 pounds) for activation or at least 2 distinct actions to release them.

(c) Woodscrews shall not be used in the assembly of any components that must be removed by the consumer in the normal disassembly of a non-standard size crib.

§ 1509.8 Construction and finishing.

(a) All wood surfaces shall be smooth and free from splinters.

(b) All wood parts shall be free from splints and cracks or other defects which might lead to structural failure.

(c) Ends and sides of non-standard size baby cribs shall have no horizontal bar, ledge, projection or other surface accessible to the child inside the crib capable of being used as a toehold (any ledge or projection with a depth dimension greater than 1 centimeter (3/8 inch) located less than 40.6 centimeters (16 inches) above the mattress support in its lowest position when the crib-side is in its highest position).

§ 1509.9 Mattresses

(a) Mattress thickness. A mattress supplied with, or intended for, a non-standard size baby crib shall , in a non-compressed state, have a thickness which will provide a minimum effective crib-side height dimension of at least 50.8 centimeters (20 inches) as measured from the upper surface of the mattress to the upper surface of the crib-side and/or end panel. For this measurement, the crib-side shall be in its highest adjustable position and the mattress support in its lowest adjustable position.

(b) Mattress dimension. The dimensions of a mattress supplied with (or intended for) a non-standard size baby crib shall be such that the mattress, in a non-compressed state, when inserted into the crib at any of the adjustable positions of the mattress support shall not leave a gap of more than 1.3 centimeters (1/2 inch) between the perimeter of the mattress and the perimeter of the crib.

§ 1509.10 Assembly instructions.

(a) Unassembled non-standard size baby cribs shall be accompanied by detailed instructions. The instructions shall:

(1) Include an assembly drawing;

(2) Include a list and description of all parts and tools required for assembly;

(3) Include a full size diagram of the required bolts and other fasteners;

(4) Be so written that an unskilled layman should be able to assemble the crib without making errors that would result in improper and unsafe assembly;

(5) Include cautionary statements concerning the secure tightening and maintaining of bolts and other fasteners;

(6) Contain a cautionary statement that when a child's height reaches 35 inches, the child should be placed in a youth bed; and

(7) Contain a warning relative to mattress size for the non-standard size baby crib which explains the substance and intent of §1509.9.

§1509.11 Identifying marks, warning statement, and compliance declaration.

(a) All non-standard size baby cribs shall be clearly marked to indicate.

(1) the name and place of business (city and state) of the manufacturer, importer, distributor and/or seller; and

(2) a model number, stock number, catalog number, item number, or other symbol expressed numerically, in code or otherwise, such that only cribs of identical construction, composition, and dimensions shall bear identical markings.

(b) The following warning shall appear on an inside surface of the crib in a type size of at least 1/8 inch.

(1) For rectangular cribs

CAUTION

Any mattress used in this crib must be at least _____ inches long by _____ inches wide and not exceed _____ inches thick. (Dimensions chosen to comply with 1509.9(a) and (b).

(2) For non-rectangular cribs

CAUTION

Check proper fit of mattress

- Minimum _____ inches thick (thickness to comply with 1509.9(a).
- One-half inch maximum gap between mattress and inside of crib border (or edge).

The dimensions to be inserted in the blanks shall be determined by the manufacturer according to the provisions of §1509.9. The marking shall appear in block letters, shall contrast sharply with the background (by color, projection, and/or indentation), and shall be clearly visible and legible.

(c) Markings on non-standard size baby cribs shall be of a permanent nature whether paint-stenciled, die-stamped, molded, or indelibly stamped directly thereon or permanently affixed, fastened, or attached thereto by means of a tag, token, or other suitable medium. The markings shall not be readily removable or subject to obliteration during normal use of the article or when the article is subjected to reasonably foreseeable damage or abuse.

(d) The retail cartons of non-standard size baby cribs shall clearly indicate:

(1) The name and place of business (mailing address including ZIP code) of the manufacturer, importer, distributor, and/or seller; and the model number, stock number, catalog number, item number, or other symbol described in paragraph (a)(2) of this section.

(e) All non-standard size baby cribs and their retail cartons shall bear a conspicuous label stating that the crib conforms to applicable regulations promulgated by the Consumer Product Safety Commission. The label need not be permanently attached to the crib, nor is any particular wording required for the statement. The label on the crib must be conspicuous under normal conditions of retail display. All non-standard size baby cribs introduced into interstate commerce for a period of two years after the effective date of the final order must bear this label.

§ 1509.12 Recordkeeping

The manufacturer or importer shall keep and maintain for three years after production or importation of each lot or other identifying unit of cribs, records of sale and distribution. These records shall be made available upon request at reasonable times to any officer, employee

or agent acting on behalf of the Consumer Product Safety Commission. The manufacturer or importer shall permit such officer, employee or agent to inspect and copy such records, to make such inventories of stock as he deems necessary, and to otherwise verify the accuracy of such records.

Effective date. This order shall become effective _____.

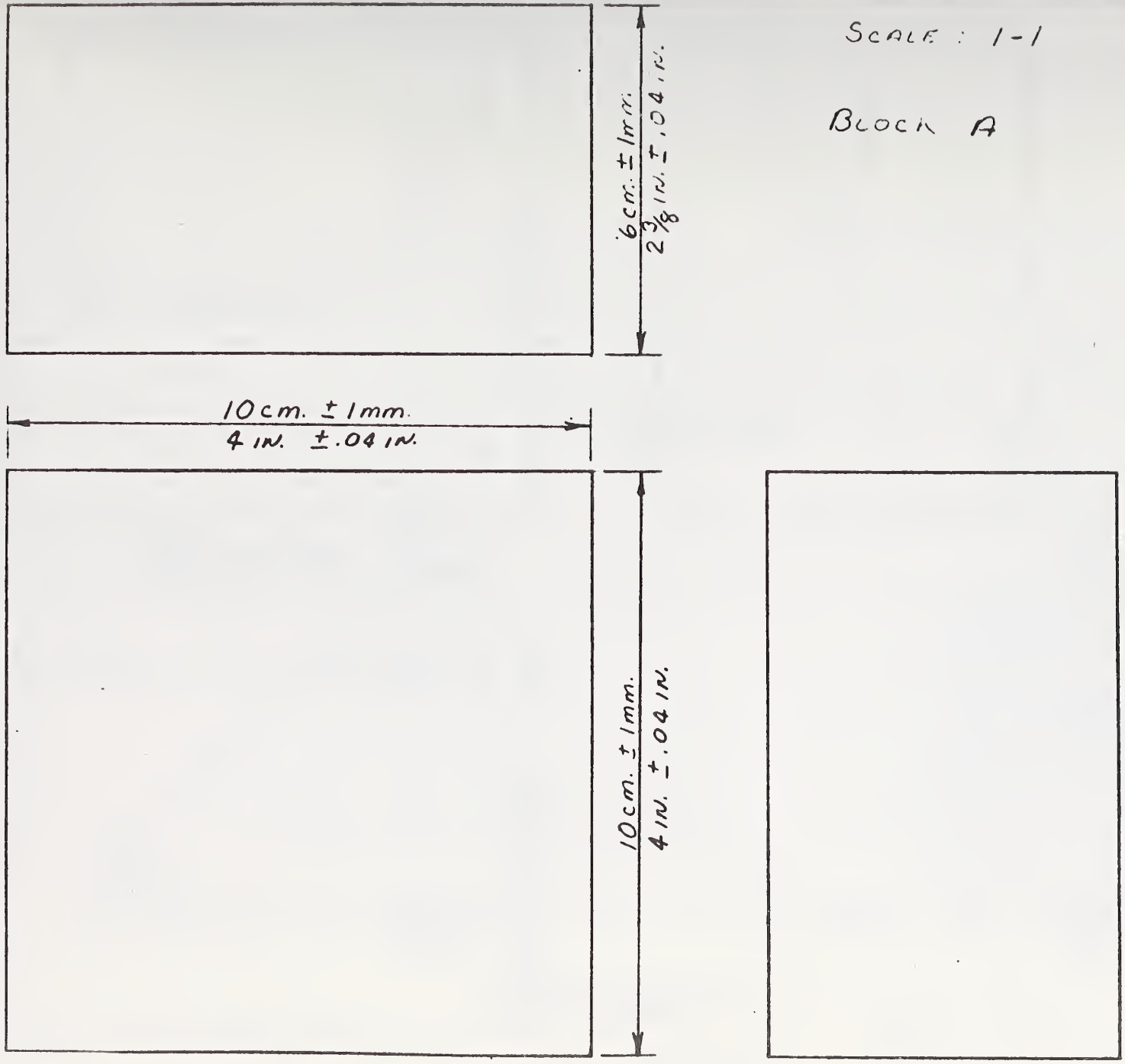
(Secs. 2(f) (1) (D), 2(g) (1) (A), 2(s), 3(e) (1), 10(a), 74 Stat. 372, 374, 375, 381, as amended, 80 Stat. 1304-1305. 83 Stat. 187-189 (15 U.S.C. 1261, 1262, 1269).

Dated:

Sadye Dunn, Secretary
Consumer Product Safety Commission

SCALE : 1-1

BLOCK A



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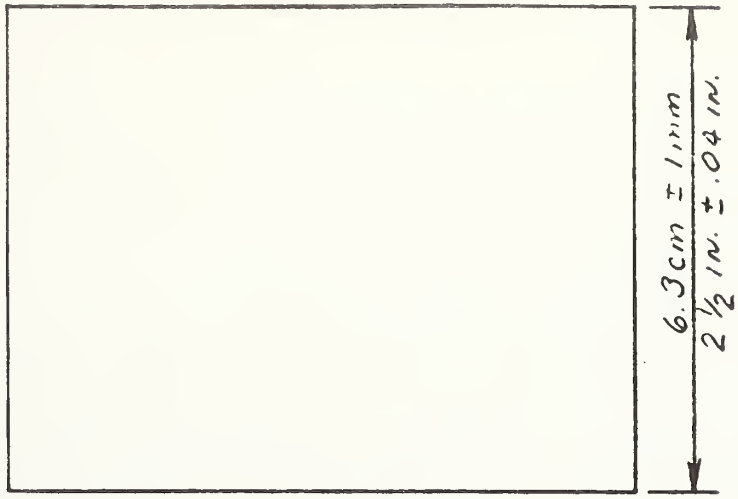
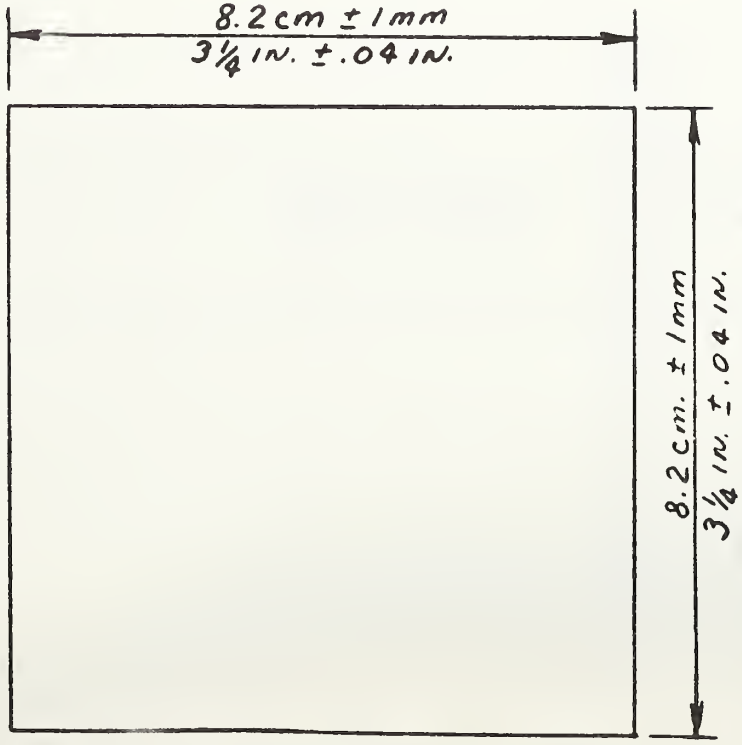
BLOCK B





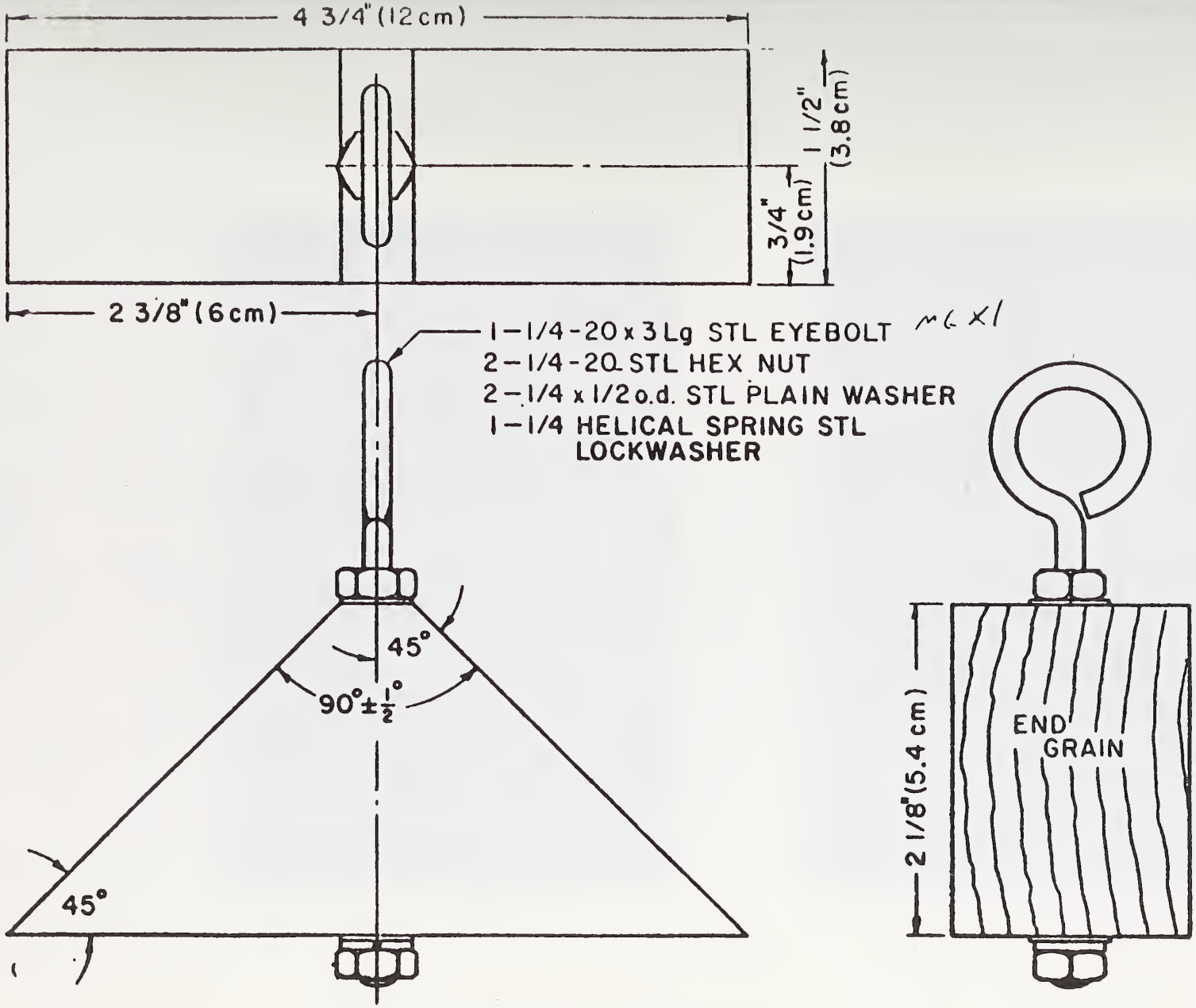


FIGURE-1

CRIB SLAT LOADING WEDGE

Figure 1

Crib No. 1 (top) and crib No. 2 (bottom) were assembled from components. A crib mattress was purchased separately for No. 1, and supplied by the manufacturer for No. 2.

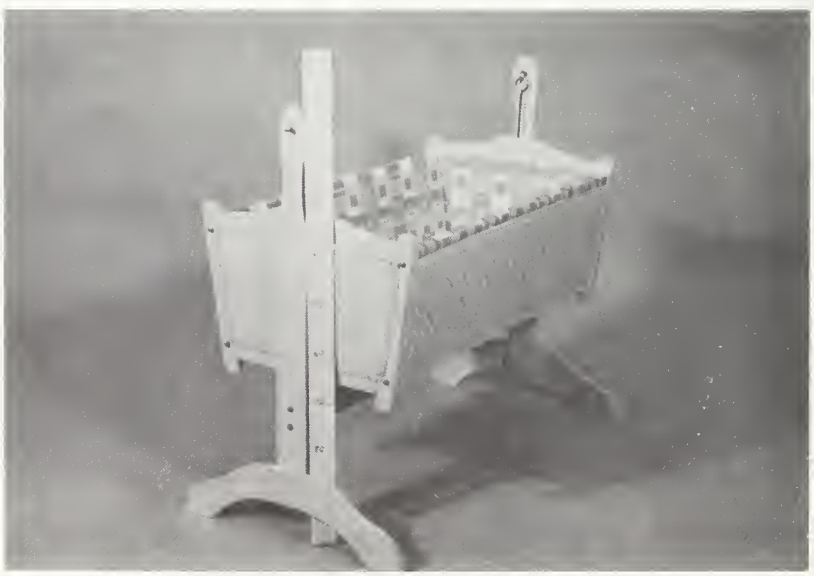


Figure 2

Crib No. 3 (top) and crib No. 4 (bottom) were assembled from components. A crib mattress was supplied for each crib by the manufacturer.

Figure 3

Crib No. 5. This crib was assembled from components. A crib mattress was supplied with the crib. Cribs No. 5 and 6 are of the same model.

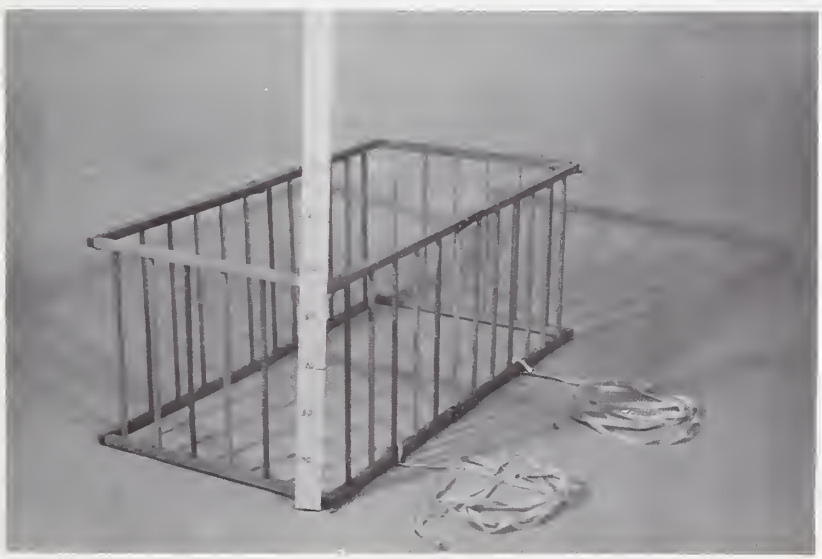


Figure 4

Crib No. 7. This crib was erected from preassembled components folded to fit into a retail carton. This crib was designed for use without a crib mattress.

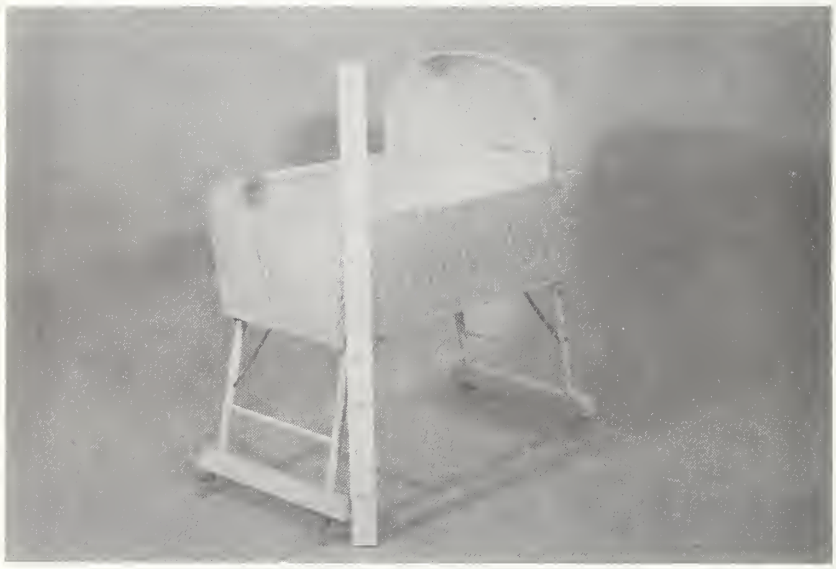


Figure 5

Crib No. 8. This bassinet was erected from preassembled components folded to fit into a retail carton. The canopy, supplied separately in the carton, could be attached and removed without using tools. A mattress was purchased separately.

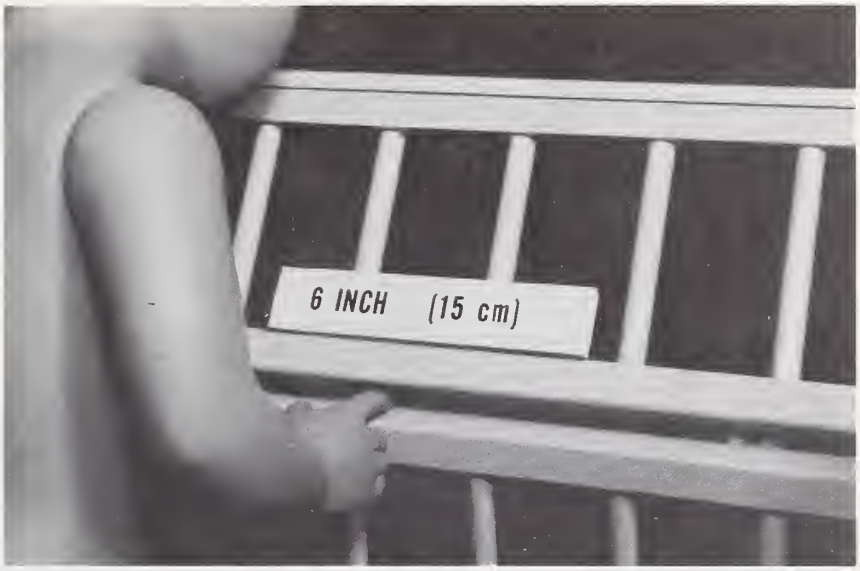


Figure 6. A potential crushing hazard presented by the horizontally-hinged crib side of crib No. 2.

Figure 7. Hazardous clearance between stationary and movable components of crib No. 5. Cribs No. 5 and 6 are of the same model.

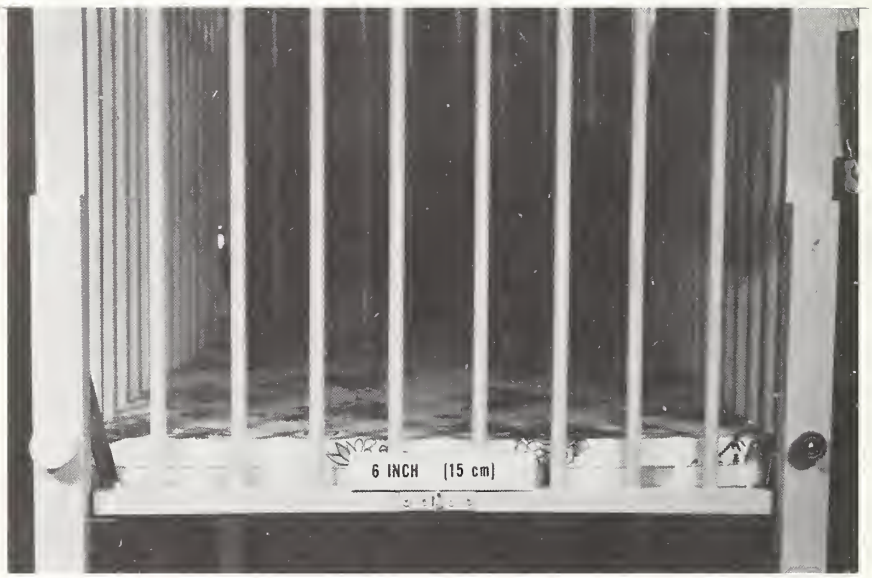


Figure 8. The plastic safety cap on the left leg-length-adjustment bolt of crib No. 2 is fractured. The other three plastic caps fractured and fell apart when used for the first time.

Figure 9. A crack in a wooden side rail of crib No. 1. This crack occurred when the woodscrew was inserted during assembly.

Figure 10. Cracked wooden slat found when the components of crib No. 6 were unpacked.

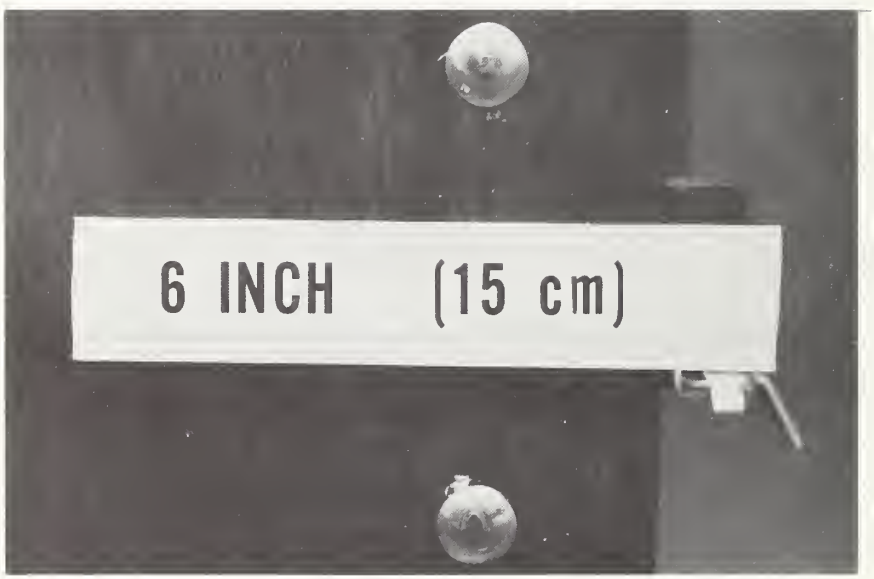


Figure 11. Note the positions of the bolts in the corner post of crib No. 3. If the bolt holes had been placed closer to the vertical axis of the corner post, the structure would have had greater load bearing strength.

Figure 12. Upon assembly, the lower edge of the crib side of crib No. 3 could not be secured to the corner post. A gap could be produced between the mattress support and the lower edge of the crib side by a small horizontal force.

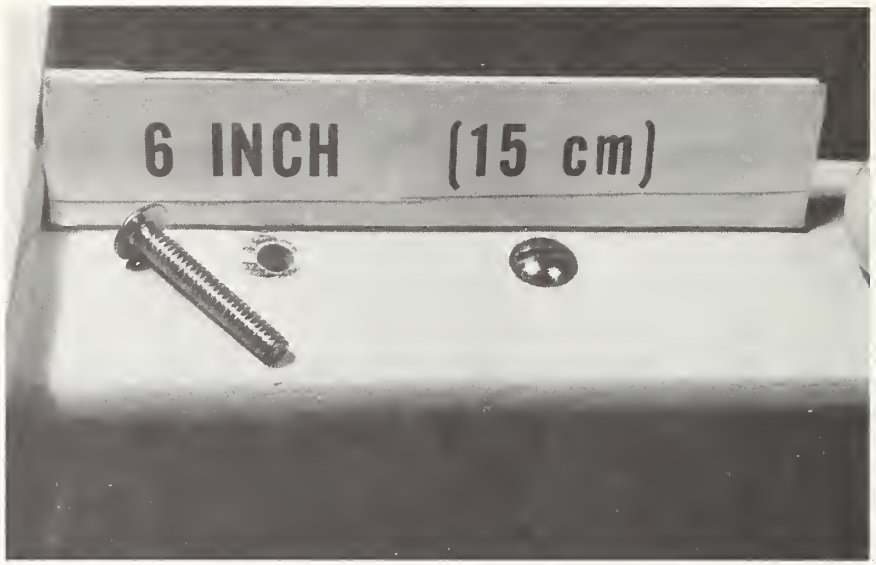


Figure 13. Crib No. 5 could not be completely assembled. A threaded bushing designed to engage the machine screw was missing from the stretcher rail.

Figure 14. Gap between the mattress support and the crib side of crib No. 6 produced by a small horizontal force. The mattress support and crib end could not be joined because of screw hole misalignment.

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A sample of non-standard size baby cribs was tested for compliance with the Consumer Product Safety Commission's Proposed Regulation for Non-Standard Size Baby Cribs in order to evaluate the Proposed Regulation, especially the tests and test procedures. The test procedures were found to be easy to interpret and to carry out. This report presents the results obtained from testing the cribs for compliance with the Proposed Regulation, a detailed description of some of the hazards, and some evaluative comments on the Proposed Regulation.

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